

Remarks

Claims 1, 7-14, 18, 38-40, and 47 have been amended. Claim 6 has been cancelled. Claims 1-5 and 7-49 are pending. Support for the amendment to claims 1 and 47 is found in the specification at page 11, lines 14-18.

Examination and reconsideration of the application as amended is requested.

Applicants respectfully request that copies of initialed 1449 forms be sent to Applicants for Applicants' file. Applicants mailed Information Disclosure Statements on October 27, 2000 and November 2, 2001.

§ 112 Rejections

Claims 18 and 38-40 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Patent Office submitted that the term "greater than about" is indefinite. Applicants have amended claims 18 and 38-40 by deleting the word "about" in each of the claims. Accordingly, Applicants respectfully request that the above rejection of claims 18 and 38-40 be withdrawn.

§ 102 Rejections

Claims 1, 6, 7, 10, 13-17, 24, 26, 27, 37-44, and 47-49 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,120,888, issued to Dolsey et al.

Dolsey et al. disclose an ink jet printable hydroentangled substrate having a coating composition disposed thereon. The coating composition may be an aqueous dispersion of a powdered thermoplastic polymer and a binder. The powdered thermoplastic polymer may be polyethylene or polyamide (column 10, lines 34-35). The only specific polyamide disclosed is a copolymer of E-caprolactam and laurolactam (column 10, line 37).

Dolsey et al. do not disclose homopolymers or copolymers of vinylactams, vinylimidizoles, or polyvinylpyridine. Homopolymers and copolymers of vinylactams are not polyamides since polyvinylactams do contain a repeating amide group in their backbone as would a copolymer of E-caprolactam and laurolactam. For at least this reason, Dolsey et al. do not

anticipate the invention as currently claimed. Accordingly, Applicants respectfully request that the above rejection of claims 1, 7, 10, 13-17, 24, 26, 27, 37-44, and 47-49 be withdrawn.

Claims 1, 6, 10-14, and 37 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,294,592 issued to Hermann et al.

Hermann et al. disclose an ink jet printing ink comprising a binder and organic pigments. Hermann et al. do not disclose organic particles comprising polymers selected from the group consisting of crosslinked homopolymers and copolymers of N-vinylactams, homopolymers and copolymers of N-vinylimidizoles, homopolymers and copolymers of polyvinylpyridine, and combinations thereof. For at least this reason, Hermann et al. do not anticipate the invention as claimed. Accordingly, Applicants respectfully request that the above rejection of claims 1, 10-14, and 37 be withdrawn.

Claims 1, 2, 6-8, 10, and 26-27 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,925,712, issued to Kronzer.

Kronzer discloses coating compositions that may include powdered thermoplastic polymer. Kronzer discloses polyethylene and polyamides (column 4, lines 48-50) and discloses a specific copolymer of E-caprolactam and lauro lactam. As discussed above with regard to Dolsey et al., Kronzer does not disclose organic particles that comprise polymers selected from the group consisting of crosslinked homopolymers and copolymers of N-vinylactams, homopolymers and copolymers of N-vinylimidizoles, homopolymers and copolymers of polyvinylpyridine, and combinations thereof. For at least this reason, Kronzer does not anticipate the claimed invention. Accordingly, Applicants respectfully request that the above rejection of claims 1, 2, 7, 8, 10, and 26-27 be withdrawn.

§ 103 Rejections

Claims 1, 18, and 29-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Dolsey et al.

Dolsey et al. do not teach or suggest polymers of vinylactams, vinylimidizoles, or vinylpyridines. Dolsey et al. disclose only polyamides and specifically a copolymer of E-caprolactam and lauro lactam. As stated above, polyamides have a repeating amide group in their

backbone. Polyvinylactams polymerize through vinyl groups. For at least these reasons, Dolsey et al. do not teach or suggest the invention as claimed. Accordingly, Applicants respectfully request that the above rejection of claims 1, 18, and 29-34 be withdrawn.

Claims 1-12, 15-21, and 28-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,989,701, issued to Goetzen et al., in view of TYVEK® Product Information Bulletin (TYVEK).

Goetzen et al. disclose a recording material having a sheet-like layer with a porous layer that contains a binder composition and from 30 to 90 weight percent of an organic pigment. The organic pigment may be a polyamide copolymer, a crosslinked polystyrene resin, a urea/formaldehyde resin or a melamine/formaldehyde resin (column 3, lines 43-45). TYVEK discloses a nonwoven web material. Goetzen et al. do not teach or suggest organic particles that comprise polymers selected from the group consisting of crosslinked homopolymers and copolymers of N-vinylactams, homopolymers and copolymers of N-vinylimidizoles, homopolymers and copolymers of polyvinylpyridine, and combinations thereof. TYVEK is silent on specific ink receiving coatings. Thus, for at least the reasons stated above, the combination of the above references as suggested by the Patent Office does not teach or suggest Applicants' invention as claimed. Accordingly, Applicants respectfully request that the above rejection of claims 1-12 15-21, and 28-49 be withdrawn.

Claims 22-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,989,701, issued to Goetzen et al., in view of TYVEK® Product Information Bulletin (TYVEK), in further view of U.S. Patent No. 5,989,771, issued to Ohta et al.

Goetzen et al. and TYVEK have been discussed above. Ohta et al. add nothing substantive to the teachings of Goetzen et al. and TYVEK. Thus, for the reasons stated above, claims 22-23 are allowable over the combination of references above. Accordingly, Applicants respectfully request that the above rejection of claims 22-23 be withdrawn.

Claims 1-12, 15-24, 26, and 28-43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,889,765, issued to Wallace, or TYVEK, in view of U.S. Patent No. 6,203,899, issued to Hirose et al.

Wallace discloses a coating composition containing an olefin copolymer having neutralized pendant acid groups and a 2-oxazoline polymer. Wallace discloses that spunbonded substrates, among others, are not readily receptive to aqueous inks. TYVEK has been discussed above.

Hirose et al. disclose a printing medium having a liquid absorbing base material, an ink-receiving layer provided on the base material and a surface layer on the ink-receiving layer. Hirose et al. require that the substrate be solvent absorbent, with water being mentioned as the solvent (column 7, lines 38-43; column 7, lines 59-60; column 10, lines 22-26). Paper is listed as the sole example. Even if nonswelling fibers are added to the paper, the mixing ratio is such that the resulting substrate has good solvent absorption (column 10, line 22-23). Thus, the ink receiving layer of Hirose et al. is designed to specifically work with underlying substrates that are absorbent to ink solvent.

On the other hand, Wallace and TYVEK disclose substrate that have very little solvent (water) absorbency. Neither Wallace nor TYVEK disclose or suggest any types of ink-receiving material that would work in combination with a non-absorbent substrate. Thus, since the base materials of Hirose et al. and TYVEK have opposite absorbency characteristics, one skilled ordinarily in the art would have no motivation to modify or combine the references as suggested by the Patent Office. Additionally, one ordinarily skilled in the art would have no expectation that such a modification as suggested by the Patent Office would have a reasonable expectation of working since the absorbency requirements of the base materials of Hirose et al. and TYVEK and Wallace are different and opposite.

Applicants' invention as claimed requires a substrate comprising fibers wherein the fibers are synthetic. Thus, none of the cited references alone disclose Applicants' invention. Accordingly, Applicants respectfully request that the above rejection of claims 1-12, 15-24, 26, and 28-43 be withdrawn.

Claims 1, 2, 6-11, 15-34, 35-40, 42, 44, 45, and 47-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,251,512, issued to Gustafson et al.

Applicants respectfully traverse that the above rejection on the grounds that such reference is not prior art under the American Inventors Protection Act of 1999. The exclusion of commonly assigned references under 102(e)/103(c) applies to applications filed on or after November 29, 1999. The present application was filed on June 9, 2000.

Gustafson et al. was filed on August 27, 1997 and was issued on June 26, 2001. Thus, Gustafson et al. would qualify as a reference under 35 U.S.C. s. 102(e). Gustafson et al. is assigned to the same entity as the present application. For these reasons, Applicants believe that Gustafson et al. is not prior art. Accordingly, Applicants request that the above rejection be withdrawn.

In view of the above amendments and remarks, Applicants respectfully request reconsideration of the claims and submit that the claims are in condition for allowance and request formal notice thereof. Examiner is invited to telephone the undersigned at the number below if Examiner believes that such a call would facilitate prosecution and allowance of the application.

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Respectfully submitted,

By


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1. (Amended) Inkjet receptive media, comprising;
a substrate defining a plurality of pores wherein the substrate comprises fibers and the fibers are synthetic fibers;

a coating overlaying at least a portion of the substrate; and
the coating comprising a plurality of organic particles wherein the organic particles comprise polymers selected from the group consisting of crosslinked homopolymers and copolymers of N-vinyl lactams, homopolymers and copolymers of N-vinylimidizoles, homopolymers and copolymers of polyvinylpyridine, and combinations thereof.

7. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers are randomly intertangled.

8. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers are spunbonded.

9. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers are spunlaced.

10. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers comprise a thermoplastic.

11. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers comprise a polyolefin.

12. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers comprise polypropylene.

13. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers comprise polyester.

14. (Amended) The inkjet receptive media of claim [6] 1, wherein the fibers comprise polyamide.

18. (Amended) The inkjet receptive media of claim 1, wherein the substrate includes a plurality of pores having a mean diameter greater than **[about]** 5 nanometers.

38. (Amended) The inkjet receptive media of claim 37, wherein the coating comprises less than **[about]** 80% binder by weight.

39. (Amended) The inkjet receptive media of claim 37, wherein the coating comprises less than **[about]** 60% binder by weight.

40. (Amended) The inkjet receptive media of claim 37, wherein the coating comprises less than **[about]** 40% binder by weight.

47. (Amended) A method of printing an image comprising the steps of;
providing an ink receptive media **[comprising a substrate and a coating including a plurality of organic particles overlaying at least a portion of the substrate] of claim 1**; and
applying an ink to the coating of the ink receptive media.